

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION of:

De et al.

Application No.: 10/080,140

Our File: I-2-0173.4US

Filed: 02/21/2002

Date: May 20, 2002

For: SINGLE USER DETECTION USER
EQUIPMENT

Group: Not Yet Known

Examiner: Not Yet Known

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Further to applicant's Duty of Disclosure pursuant to 37 C.F.R. § 1.56, applicant wishes to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form.

Applicant: De et al.
Application No.: 10/080,140

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his consideration of the cited materials.

Respectfully submitted,

De et al.

By


Jeffrey M. Glabicki
Registration No. 42,584
(215) 568-6400

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Volpe and Koenig, P.C.
Suite 400, One Penn Center
1617 John F. Kennedy Boulevard
Philadelphia, PA 19103

JMG/jrd
Enclosures

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FORM PTO-1449			ATTY. DOCKET NO. I-2-0173.4US	SERIAL NO. 10/080,140
			APPLICANT De et al.	
			FILING DATE 2/21/2002	GROUP Not Yet Known
(Use several sheets if necessary)				

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES
							NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AA	Ramjee Prasad, Werner Mohr and Walter Konhauser editors, <i>Third Generation Mobile Communication Systems</i> , Artech House, Boston, 2000.
	AB	Anja Klein, Ghassan Kawas Kalleh and Paul Walter Baier, "Zero Forcing and Minimum Mean-Square Error Equalization for Multiuser Detection in Code-Division Multiple-Access Channels", <i>IEEE Trans. on Vehicular Technology</i> , Vol.45, No. 2, pp. 276-287, May 1996.
	AC	Naja Klein, "Data Detection Algorithms Specially Designed for the Downlink of CDMA Mobile Radio Systems", <i>IEEE 47th Vehicular Technology Conference</i> , pp. 203-207, May 1997.
	AD	H.R. Karimi and N.W. Anderson, "A Novel and Efficient Solution to Block-Based Joint-Detection using Approximate Cholesky Factorization", <i>Personal, Indoor and Mobile Communications PIMRC' 98</i> , Conference Proceedings, Vol. 3, pp. 1340-1345, Sept. 1998, Boston, MA.
	AE	ETSI STC SMG2 Layer 1 Expert Group, "Low Cost MMSE-BLE-SD Algorithm for UTRA TDD Mode Downline", Tdoc SMG2 UMTS L1, Helsinki, Finland, Sept. 1998.
	AF	3G TS 25.102 V3.4.0, 2000-10, "UTRA (TDD) Radio Transmission and Reception", 3rd Generation Partnership Project, Technical Specification Group RAN WG4, Annex B., pp. 37.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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2631 BST
5-29-02

Please type a plus sign (+) inside this box → +

PTO/SB/21 (08-00)

Approved for use through 10/31/2002, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	10/080,140
		Filing Date	2/21/2002
		First Named Inventor	De et al.
		Group Art Unit	Not Yet Known
		Examiner Name	Not Yet Known
Total Number of Pages in This Submission	7	Attorney Docket Number	I-2-0173.4US

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ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers <i>(for an Application)</i>	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group <i>(Appeal Notice, Brief, Reply Brief)</i>
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	JEFFREY M. GLABICKI Volpe and Koenig, P.C.	Reg. No. 42,584
Signature		
Date	May 20, 2002	

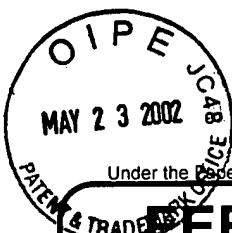
CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:

May 20, 2002

Typed or printed name	JEFFREY M. GLABICKI		
Signature		Date	May 20, 2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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Volpe and Koenig Revision of PTO/SB/17 (10-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Fee Transmittal for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT	(\\$) 0
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Complete if Known

Application Number	10/080,140
Filing Date	2/21/2002
First Named Inventor	De et al.
Examiner Name	Not Yet Known
Group Art Unit	Not Yet Known
Attorney Docket No.	I-2-0173.4US

METHOD OF PAYMENT

1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number **22-0493**
Deposit Account Name **VOLPE AND KOENIG, P.C.**

Charge any Deficiencies or Credit any Overpayment in the Total Fees Associated With This Communication

Applicant claims small entity status.
See 37 CFR 1.27

2. Payment Enclosed:

Check Credit card Money Order Other

Fee Calculation

1. BASIC FILING FEE

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee
106	330	206	165	Design filing fee
107	510	207	255	Plant filing fee
108	740	208	370	Reissue filing fee
114	160	214	80	Provisional filing fee

SUBTOTAL (1) (\\$) 0

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	** = <input type="text"/>	X <input type="text"/>	= <input type="text"/>
Multiple Dependent	** = <input type="text"/>	X <input type="text"/>	= <input type="text"/>

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description	
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\\$) 0

**or number previously paid, if greater; For Reissues, see above

Fee Calculation (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	
105	130	205	65	Surcharge - late filing fee or oath
127	50	227	25	Surcharge - late provisional filing fee or cover sheet
139	130	139	130	Non-English specification
147	2,520	147	2,520	For filing a request for ex parte reexamination
112	920*	112	920*	Requesting publication of SIR prior to Examiner action
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action
115	110	215	55	Extension for reply within first month
116	400	216	200	Extension for reply within second month
117	920	217	460	Extension for reply within third month
118	1,440	218	720	Extension for reply within fourth month
128	1,960	228	980	Extension for reply within fifth month
119	320	219	160	Notice of Appeal
120	320	220	160	Filing a brief in support of an appeal
121	280	221	140	Request for oral hearing
138	1,510	138	1,510	Petition to institute a public use proceeding
140	110	240	55	Petition to revive - unavoidable
141	1,280	241	640	Petition to revive - unintentional
142	1,280	242	640	Utility issue fee (or reissue)
143	460	243	230	Design issue fee
144	620	244	310	Plant issue fee
122	130	122	130	Petitions to the Commissioner
123	50	123	50	Processing fee under 37 CFR 1.17(q)
126	180	126	180	Submission of Information Disclosure Stmt
581	40	581	40	Recording each patent assignment per property (times number of properties)
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))
179	740	279	370	Request for Continued Examination (RCE)
169	900	169	900	Request for expedited examination of a design application
Other fee (specify) _____				

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\\$) 0

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SUBMITTED BY

Name (Print/Type)	Jeffrey M. Glabicki	Registration No. (Attorney/Agent)	42,584	Telephone	215-568-6400	
Signature					Date	May 20, 2002

Complete (if applicable)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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